



# ANTERO RESOURCES CORPORATION



Location: Doddridge Co., WV  
Field: Doddridge  
Facility: Lemley Pad

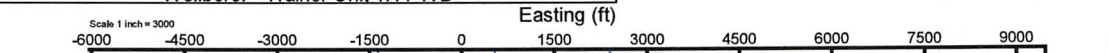
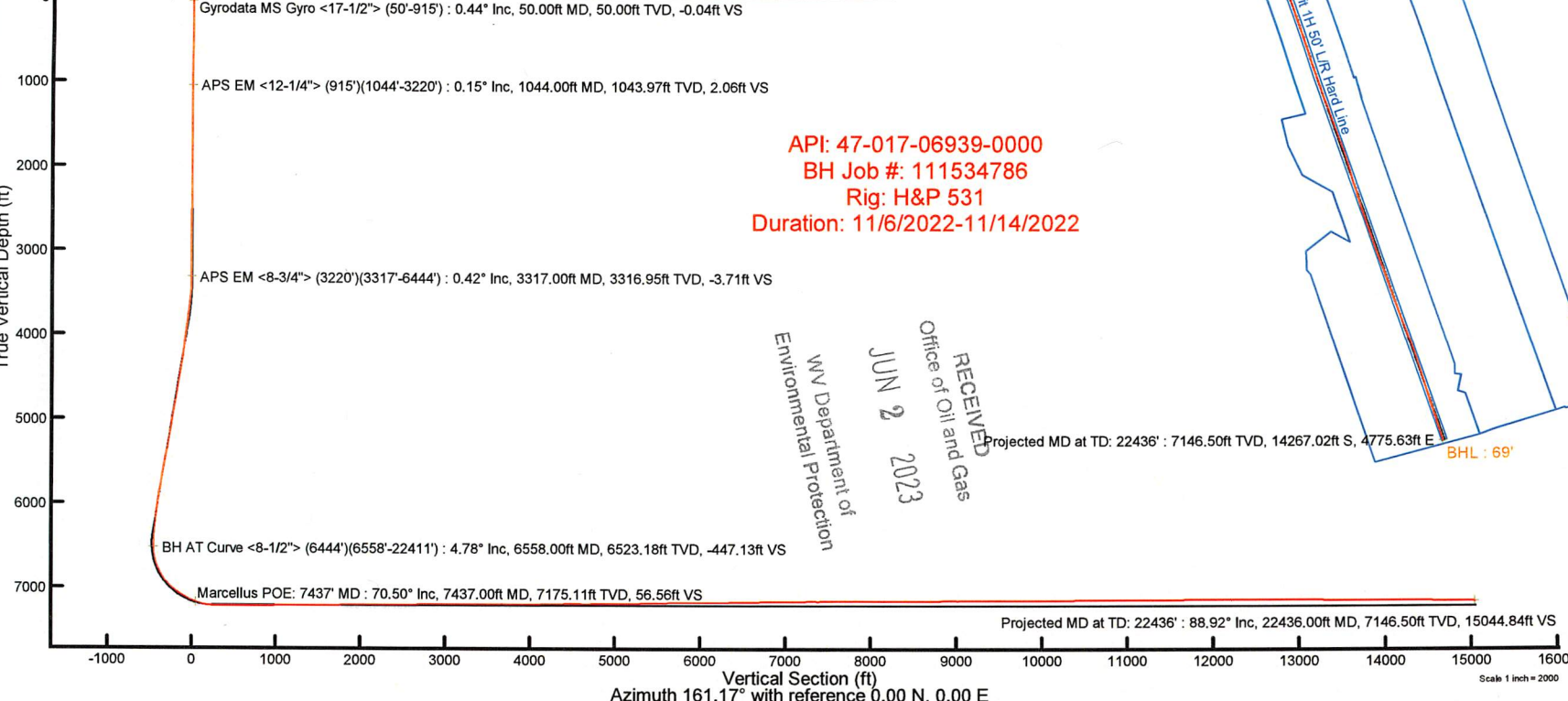
Slot: Slot A  
Well: Trainer Unit 1H  
Wellbore: Trainer Unit 1H PWB

Plot reference wellpath is Trainer Unit 1H PWP Rev-A.1	Grid System: NAD27 / UTM Zone 17 North, US Feet
True vertical depths are referenced to H&P 531 (RKB)	North Reference: Grid north
Reference wellpath measured depths are referenced to H&P 531 (RKB)	Scale: True distance
H&P 531 (RKB) to Mean Sea Level: 1334 feet	Coordinates are in feet referenced to Slot
Mean Sea Level to Ground level (At Slot A): -1304 feet	Depths are in feet
Offset wellpath MDs are referenced to each path's default MD datum	Created by: edsaryar on 2022-12-11; Database: WA_MPL_EASTERNUS_Defn

Location Information				
Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Lemley Pad	1730799.540	14280893.670	39°19'34.6023"N	80°40'49.4048"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)
Slot A	30.02	0.82	1730800.360	14280923.680
Comment: Trainer Unit 1H				
H&P 531 (RKB) to Ground level (At Slot: Slot A)			30ft	
Mean Sea Level to Ground level (At Slot: Slot A)			-1304ft	
H&P 531 (RKB) to Mean Sea Level			1334ft	

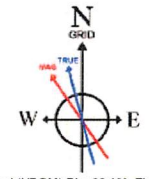
Well Profile Data								
Design Comment	MD (ft)	Inc (")	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	30.00	0.000	334.606	30.00	0.00	0.00	0.00	0.00
KOP 1	3350.00	0.000	334.606	3350.00	0.00	0.00	0.00	0.00
End of Build	3822.71	9.454	334.606	3820.57	35.15	-16.69	2.00	-38.66
Curve KOP	6414.33	9.454	334.606	6376.99	419.72	-199.24	0.00	-461.56
POE	7404.42	69.812	161.168	7166.00	-18.74	-61.45	8.00	-2.10
Landing Pt.	7656.77	90.000	161.168	7210.00	-252.67	18.33	8.00	245.06
BHL	22465.19	90.000	161.168	7210.00	-14268.36	4798.45	0.00	15053.48

Well Data			
Slot	Well	Wellbore	Wellpath
Slot A	Trainer Unit 1H	Trainer Unit 1H AWB	Trainer Unit 1H AWP Proj: 22436'
Slot A	Trainer Unit 1H	Trainer Unit 1H PWB	Trainer Unit 1H PWP Rev-A.1



BH AT Curve <8-1/2"> (6444')(6558'-22411') : 6523.18ft TVD, 404.56ft N, 198.97ft W  
 APS EM <8-3/4"> (3220')(3317'-6444') : 3316.95ft TVD, 1.93ft N, 5.83ft W  
 APS EM <12-1/4"> (915')(1044'-3220') : 1043.97ft TVD, 1.77ft S, 1.20ft E  
 Gyrodata MS Gyro <17-1/2"> (50'-915') : 50.00ft TVD, 0.06ft N, 0.05ft E

POE : 107' Slot A  
 Marcellus POE: 7437' MD : 7175.11ft TVD, 75.13ft S, 45.08ft W



User specified (HDGM) Dip: 66.18° Field: 51883 nT  
 Magnetic North is 7.95 degrees West of True North (at 11/5/2022)  
 Grid North is 0.20 degrees East of True North  
 To correct azimuth from True to Grid subtract 0.20 degrees  
 To correct azimuth from Magnetic to Grid subtract 8.15 degrees

API: 47-017-06939-0000  
 BH Job #: 111534786  
 Rig: H&P 531  
 Duration: 11/6/2022-11/14/2022

RECEIVED  
 Office of Oil and Gas  
 JUN 2 2023  
 WV Department of  
 Environmental Protection

Projected MD at TD: 22436' : 7146.50ft TVD, 14267.02ft S, 4775.63ft E  
 BHL : 69'  
 Projected MD at TD: 22436' : 88.92° Inc, 22436.00ft MD, 7146.50ft TVD, 15044.84ft VS

API 47-017-06939 Farm Name Brian D. Lemley & Christv M. Lemaster ET AL Well Number Trainer Unit 1H

**Exhibit 1**

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	1/15/2023	22318	22274	60	Marcellus
2	1/16/2023	22236.63739	22071.8243	60	Marcellus
3	1/16/2023	22036.46171	21871.6486	60	Marcellus
4	1/16/2023	21836.28604	21671.473	60	Marcellus
5	1/16/2023	21636.11036	21471.2973	60	Marcellus
6	1/17/2023	21435.93468	21271.1216	60	Marcellus
7	1/17/2023	21235.75901	21070.9459	60	Marcellus
8	1/17/2023	21035.58333	20870.7703	60	Marcellus
9	1/17/2023	20835.40766	20670.5946	60	Marcellus
10	1/18/2023	20635.23198	20470.4189	60	Marcellus
11	1/18/2023	20435.05631	20270.2432	60	Marcellus
12	1/18/2023	20234.88063	20070.0676	60	Marcellus
13	1/18/2023	20034.70495	19869.8919	60	Marcellus
14	1/18/2023	19834.52928	19669.7162	60	Marcellus
15	1/19/2023	19634.3536	19469.5405	60	Marcellus
16	1/19/2023	19434.17793	19269.3649	60	Marcellus
17	1/19/2023	19234.00225	19069.1892	60	Marcellus
18	1/19/2023	19033.82658	18869.0135	60	Marcellus
19	1/20/2023	18833.6509	18668.8378	60	Marcellus
20	1/20/2023	18633.47523	18468.6622	60	Marcellus
21	1/20/2023	18433.29955	18268.4865	60	Marcellus
22	1/20/2023	18233.12387	18068.3108	60	Marcellus
23	1/20/2023	18032.9482	17868.1351	60	Marcellus
24	1/21/2023	17832.77252	17667.9595	60	Marcellus
25	1/21/2023	17632.59685	17467.7838	60	Marcellus
26	1/21/2023	17432.42117	17267.6081	60	Marcellus
27	1/21/2023	17232.2455	17067.4324	60	Marcellus
28	1/21/2023	17032.06982	16867.2568	60	Marcellus
29	1/21/2023	16831.89414	16667.0811	60	Marcellus
30	1/22/2023	16631.71847	16466.9054	60	Marcellus
31	1/22/2023	16431.54279	16266.7297	60	Marcellus
32	1/22/2023	16231.36712	16066.5541	60	Marcellus
33	1/22/2023	16031.19144	15866.3784	60	Marcellus
34	1/22/2023	15831.01577	15666.2027	60	Marcellus
35	1/23/2023	15630.84009	15466.027	60	Marcellus
36	1/23/2023	15430.66441	15265.8514	60	Marcellus
37	1/23/2023	15230.48874	15065.6757	60	Marcellus
38	1/23/2023	15030.31306	14865.5	60	Marcellus
39	1/23/2023	14830.13739	14665.3243	60	Marcellus
40	1/24/2023	14629.96171	14465.1486	60	Marcellus
41	1/24/2023	14429.78604	14264.973	60	Marcellus
42	1/24/2023	14229.61036	14064.7973	60	Marcellus
43	1/24/2023	14029.43468	13864.6216	60	Marcellus
44	1/24/2023	13829.25901	13664.4459	60	Marcellus
45	1/24/2023	13629.08333	13464.2703	60	Marcellus
46	1/25/2023	13428.90766	13264.0946	60	Marcellus
47	1/25/2023	13228.73198	13063.9189	60	Marcellus
48	1/25/2023	13028.55631	12863.7432	60	Marcellus
49	1/25/2023	12828.38063	12663.5676	60	Marcellus
50	1/25/2023	12628.20495	12463.3919	60	Marcellus
51	1/25/2023	12428.02928	12263.2162	60	Marcellus
52	1/26/2023	12227.8536	12063.0405	60	Marcellus
53	1/26/2023	12027.67793	11862.8649	60	Marcellus
54	1/26/2023	11827.50225	11662.6892	60	Marcellus
55	1/26/2023	11627.32658	11462.5135	60	Marcellus
56	1/26/2023	11427.1509	11262.3378	60	Marcellus
57	1/26/2023	11226.97523	11062.1622	60	Marcellus
58	1/27/2023	11026.79955	10861.9865	60	Marcellus
59	1/27/2023	10826.62387	10661.8108	60	Marcellus
60	1/27/2023	10626.4482	10461.6351	60	Marcellus
61	1/27/2023	10426.27252	10261.4595	60	Marcellus
62	1/27/2023	10226.09685	10061.2838	60	Marcellus
63	1/27/2023	10025.92117	9861.10811	60	Marcellus
64	1/27/2023	9825.745495	9660.93243	60	Marcellus
65	1/28/2023	9625.56982	9460.75676	60	Marcellus
66	1/28/2023	9425.394144	9260.58108	60	Marcellus
67	1/28/2023	9225.218468	9060.40541	60	Marcellus
68	1/28/2023	9025.042793	8860.22973	60	Marcellus
69	1/28/2023	8824.867117	8660.05405	60	Marcellus
70	1/28/2023	8624.691441	8459.87838	60	Marcellus
71	1/29/2023	8424.515766	8259.7027	60	Marcellus
72	1/29/2023	8224.34009	8059.52703	60	Marcellus
73	1/29/2023	8024.164414	7859.35135	60	Marcellus
74	1/29/2023	7823.988739	7659.17568	60	Marcellus
75	1/29/2023	7623.813063	7459	60	Marcellus

RECEIVED  
Office of Oil and Gas  
JUN 2 2023  
WV Department of  
Environmental Protection

02/09/2024

API 47-017-06939 Farm Name Brian D. Lemley & Christy M. Lemaster ET AL Well Number Trainer Unit 1H

**EXHIBIT 2**

Stage No.	Stimulations Date	Avg Pump Rate	Avg Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/ other (units)
1	1/15/2023	77.4	10138.7	8785.31	5120.623	172520	237827	N/A
2	1/16/2023	91.5	10258.0	6868	5401	397870	363780	N/A
3	1/16/2023	89.5	10100.3	6555.64	5968.101	395440	305008	N/A
4	1/16/2023	88.2	10286.6	6253.56	5362.952	413430	287507	N/A
5	1/16/2023	91.9	10425.8	7352.53	5463.001	393990	286201	N/A
6	1/17/2023	92.8	10487.3	6792.32	5753.024	400690	294337	N/A
7	1/17/2023	90.3	10137.5	6271.49	5875.478	395260	382538	N/A
8	1/17/2023	90.8	10213.5	6010.46	5866.463	397010	286231	N/A
9	1/17/2023	91.0	10218.0	6801	4880	406370	295056	N/A
10	1/18/2023	95.5	10269.0	6890	5587	392500	288175	N/A
11	1/18/2023	92.5	10241.5	6427.98	5481.667	408340	295518	N/A
12	1/18/2023	94.2	10168.0	7028	5670	406390	290552	N/A
13	1/18/2023	95.7	10066.0	6306	5865	413840	333628	N/A
14	1/18/2023	95.5	9952.0	6403	5590	415790	296581	N/A
15	1/19/2023	95.8	10105.0	6247	5521	416780	287500	N/A
16	1/19/2023	95.4	9953.2	6323.38	5438.464	411030	286975	N/A
17	1/19/2023	90.4	9773.0	6438	5329	412990	288957	N/A
18	1/19/2023	96.1	9728.0	6120	5564	415750	303739	N/A
19	1/20/2023	96.1	10003.0	5782	5217	414270	291536	N/A
20	1/20/2023	94.5	9940.2	5948.7	5330.022	413180	294558	N/A
21	1/20/2023	94.6	9755.7	6303.8	5353.944	408670	289776	N/A
22	1/20/2023	94.8	9941.7	6223.37	5201.353	413930	285401	N/A
23	1/20/2023	94.7	9978.0	6091	5416	414020	284751	N/A
24	1/21/2023	96.2	9606.0	6005	5319	411500	297225	N/A
25	1/21/2023	95.4	9650.0	5911	5335	413490	292766	N/A
26	1/21/2023	95.1	9729.4	6020.48	4834.464	408680	286857	N/A
27	1/21/2023	95.8	9822.0	6395	5217	413100	286157	N/A
28	1/21/2023	92.0	9802.0	5914	4760	415160	298134	N/A
29	1/21/2023	96.3	9717.0	6073	5533	404140	283756	N/A
30	1/22/2023	96.5	9635.0	5009	4930	415120	290322	N/A
31	1/22/2023	96.1	9697.5	5422.22	5085.815	416330	292062	N/A
32	1/22/2023	94.8	9220.2	5482.84	5505.23	408660	283059	N/A
33	1/22/2023	95.5	9502.2	6399.48	5308.017	398580	281232	N/A
34	1/22/2023	95.9	9579.7	6043.2	5588.268	417590	285395	N/A
35	1/23/2023	95.9	9499.0	6583	5197	409960	301393	N/A
36	1/23/2023	95.5	9428.8	5753.26	5457.786	414250	280207	N/A
37	1/23/2023	95.3	9489.0	5958	5270	392250	277866	N/A
38	1/23/2023	94.4	9208.0	5677	4840	410780	282207	N/A
39	1/23/2023	96.3	9295.0	5662	6077	397920	280992	N/A
40	1/24/2023	96.8	9307.3	6273.61	5092.359	408630	289242	N/A
41	1/24/2023	97.5	9448.7	5578.14	4556.597	406810	283207	N/A
42	1/24/2023	95.9	9210.0	5584	5487	408820	276701	N/A
43	1/24/2023	95.3	9188.0	6030	5588	410080	280689	N/A
44	1/24/2023	95.9	9107.0	5939	5090	395960	270796	N/A
45	1/24/2023	95.6	9121.3	6001.85	5630.564	411170	279525	N/A
46	1/25/2023	95.3	9036.0	5764.46	5102.783	412710	283014	N/A
47	1/25/2023	96.9	9098.3	5987.88	5467.023	409630	283264	N/A
48	1/25/2023	95.6	8905.0	5519	5049	413490	280109	N/A
49	1/25/2023	95.3	8844.0	5479	5129	411730	285462	N/A
50	1/25/2023	94.8	8865.0	6219	5315	394500	290180	N/A
51	1/25/2023	96.6	8841.1	5403.95	5213.349	414830	276834	N/A
52	1/26/2023	97.4	8931.4	5817.72	4414.537	416760	284814	N/A
53	1/26/2023	96.1	9053.0	5640	4258	398960	267960	N/A
54	1/26/2023	96.0	8531.2	5418.27	5157.334	393400	268654	N/A
55	1/26/2023	96.3	8604.0	5379	4753	396840	326575	N/A
56	1/26/2023	95.9	8724.0	5566	4669	413210	278165	N/A
57	1/26/2023	96.9	8806.6	5528.98	5631.912	411870	274701	N/A
58	1/27/2023	97.1	8284.3	4018.4	4563.9	414090	271461.0	N/A
59	1/27/2023	97.7	8509.5	6114.0	4685.2	395880	266202.0	N/A
60	1/27/2023	96.2	8396.0	5587.0	4430.0	409980	274735.0	N/A
61	1/27/2023	93.1	8512.0	5544.0	4849.0	407670	277670.0	N/A
62	1/27/2023	96.3	7931.0	5582.0	5340.0	396010	273702.0	N/A
63	1/27/2023	97.2	7935.8	5632.3	5370.2	395460	271405.0	N/A
64	1/27/2023	96.9	7970.2	5789.9	4394.1	413120	277804.0	N/A
65	1/28/2023	97.0	7919.1	5649.2	4680.9	412700	275231.0	N/A
66	1/28/2023	96.5	7974.1	5756.9	4093.8	416670	287176.0	N/A
67	1/28/2023	96.1	7661.1	5493.3	4617.9	400990	277034.0	N/A
68	1/28/2023	95.9	7674.0	5765.0	5481.0	398670	282641.0	N/A
69	1/28/2023	96.5	7657.7	5686.1	4766.8	399230	280421.0	N/A
70	1/28/2023	97.7	7596.5	5354.3	5335.6	410320	281803.0	N/A
71	1/29/2023	97.6	7559.1	5844.4	4067.9	412150	284429.0	N/A
72	1/29/2023	97.7	7694.8	5740.3	4216.0	396160	275214.0	N/A
73	1/29/2023	96.5	7644.0	5707.0	4878.0	410060	280677.0	N/A
74	1/29/2023	95.8	7523.0	5639.0	4063.0	402360	297364.0	N/A
75	1/29/2023	96.5	7488.0	5815.3	4054.3	408630	280734.0	N/A
	AVERAGE	95	9,181	5,978	5,147	30,307,120	21,551,357	TOTAL

RECEIVED  
Office of Oil and Gas  
JUN 2 2023  
WV Department of  
Environmental Protection

02/09/2024

## EXHIBIT 3

LITHOLOGY/ FORMATION	TOP DEPTH (TVD)	BOTTOM DEPTH (TVD)	TOP DEPTH (MD)	BOTTOM DEPTH (MD)
	From Surface	From Surface	From Surface	From Surface
Sandstone, rr Siltstone	100	450	100	450
Silty Sandstone, tr Shale	450	510	450	510
Silty Sandstone, com Coal	510	630	510	630
Silty Sandstone	570	720	570	720
Sandstone, com LS	630	720	630	720
Silty Sandstone	720	780	720	780
Silty Sandstone, tr Shale	780	1,070	780	1,070
Sandstone, rr Siltstone	1,070	1,220	1,070	1,220
Silty Sandstone	1,220	1,520	1,220	1,520
Silty Sandstone, com Shale	1,520	1,670	1,520	1,670
Sandstone	1,670	1,770	1,670	1,770
Silty Sandstone, tr Shale	1,770	1,870	1,770	1,870
Sandstone, tr Coal	1,870	1,920	1,870	1,920
Sandstone	1,920	1,970	1,920	1,970
Silty Sandstone	1,970	2,123	1,970	2,123
Big Lime	2,153	2,727	2,123	2,727
Fifty Foot Sandstone	2,727	2,900	2,697	2,900
Gordon	2,900	3,239	2,870	3,239
Fifth Sandstone	3,239	3,311	3,209	3,311
Bayard	3,311	4,001	3,281	4,006
Speechley	4,001	4,253	3,976	4,260
Balltown	4,253	4,788	4,230	4,802
Bradford	4,788	5,241	4,772	5,261
Benson	5,241	5,530	5,231	5,555
Alexander	5,530	6,912	5,525	6,977
Sycamore	6,740	6,882	6,782	6,947
Middlesex	6,882	7,034	6,947	7,172
Burkett	7,034	7,064	7,172	7,226
Tully	7,064	7,144	7,226	7,407
Marcellus	7,144	NA	7,407	NA

\*Please note Antero determines formation tops based on mud logs that are only run on one well on a multi-well pad. The measured depth (MD) data on subsequent wells may be slightly different due to the well's unique departure.

RECEIVED  
Office of Oil and Gas  
JUN 2 2023  
WV Department of  
Environmental Protection

02/09/2024

## Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	1/15/2023
Job End Date:	1/29/2023
State:	West Virginia
County:	Doddridge
API Number:	47-017-06939-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Trainer 1H
Latitude:	39.32636000
Longitude:	-80.68039000
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	7,216
Total Base Water Volume (gal):	22,664,906
Total Base Non Water Volume:	0



### Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
Fresh Water	Halliburton	Base Fluid					
			Water	7732-18-5	100.00000	85.99333	Density = 8.34
Ingredients	Listed Above	Listed Above					
			Water	7732-18-5	100.00000	0.15378	

RECEIVED  
 Office of Oil and Gas  
 WV Department of  
 Environmental Protection  
 JUN 2 2023

LEGEND(TM) LD-7750W	MultiChem	Scale Control					
				Listed Below			
HAI-501	Halliburton	Acid Corrosion Inhibitor					
				Listed Below			
MC B-8614A	MultiChem	Biocide					
				Listed Below			
WG-36 GELLING AGENT	Halliburton	Gelling Agent					
				Listed Below			
OPTIFLO-II DELAYED RELEASE BREAKER	Halliburton	Breaker					
				Listed Below			
Sand-Common White-100 Mesh, SSA-2	Halliburton	Proppant					
				Listed Below			
Chemstream StimSTREAM FR 9750	Chemstream Oilfield Services	Friction Reducer					
				Listed Below			
HYDROCHLORI C ACID, 22 BAUME	Halliburton	Solvent					
				Listed Below			

RECEIVED  
 Office of Oil and Gas  
 WV Department of  
 Environmental Protection  
 JUN 2 2023

Items above are Trade Names with the exception of Base Water . Items below are the individual ingredients.						
			Crystalline silica, quartz	14808-60-7	100.00000	13.78764
			Hydrochloric acid	7647-01-0	30.00000	0.04076
			Distillates (petroleum), hydrotreated light	64742-47-8	25.00000	0.01500
			Methanol	67-56-1	100.00000	0.00717
			Guar gum	9000-30-0	100.00000	0.00489
			Alcohols, C11-14-iso, C-13-rich, ethoxylated	78330-21-9	5.00000	0.00300
			Glutaraldehyde	111-30-8	30.00000	0.00250
			Phosphoric Acid Salt	Proprietary	5.00000	0.00058
			Sodium chloride	7647-14-5	5.00000	0.00058
			Alkyl (C12-16) dimethylbenzyl ammonium chloride	68424-85-1	5.00000	0.00042
			Ammonium persulfate	7727-54-0	100.00000	0.00013
			Ethanol	64-17-5	1.00000	0.00008
			Modified thiourea polymer	Proprietary	30.00000	0.00008
			Mixture of dimer and trimer fatty acids of indefinite composition derived from tall oil	61790-12-3	30.00000	0.00008
			Oxylated phenolic resin	Proprietary	30.00000	0.00004
			Hexadecene	629-73-2	5.00000	0.00001
			Ethoxylated alcohols	Proprietary	5.00000	0.00001
			Propargyl alcohol	107-19-7	5.00000	0.00001
			Formaldehyde	50-00-0	0.10000	0.00001
			C.I. pigment Orange 5	3468-63-1	1.00000	0.00000

\* Total Water Volume sources may include various types of water including fresh water, produced water, and recycled water

\*\* Information is based on the maximum potential for concentration and thus the total may be over 100%

\*\*\* If you are calculating a percentage of total ingredients do not add the water volume below the green line to the water volume above the green line

Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided.

Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)

RECEIVED  
 Office of Oil and Gas  
 JUN 2 2023  
 WV Department of  
 Environmental Protection



# Actual Wellpath Report

Trainer Unit 1H AWP Proj: 22436'

Page 1 of 12



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Trainer Unit 1H
Field	Doddridge	API	47-017-06939-0000
Facility	Lemley Pad	Wellbore	Trainer Unit 1H AWB
Slot	Slot A		

REPORT SETUP INFORMATION			
Projection System	NAD27 / UTM Zone 17 North, US feet	Software System	WellArchitect® 6.0
North Reference	Grid	User	Edsaryar
Scale	0.999609	Report Generated	12/11/2022 at 6:12:23 PM
Convergence at slot	0.20° East	Database	WA_MPL_EASTERNUS_Defn

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	30.02	0.82	1730800.36	14280923.68	39°19'34.8990"N	80°40'49.3930"W
Facility Reference Pt			1730799.54	14280893.67	39°19'34.6023"N	80°40'49.4048"W
Field Reference Pt			0.00	0.00	0°00'0.0000"	85°29'19.3013"W

WELLPATH DATUM			
Calculation method	Minimum curvature	H&P 531 (RKB) to Facility Vertical Datum	1334.00ft
Horizontal Reference Pt	Slot	H&P 531 (RKB) to Mean Sea Level	1334.00ft
Vertical Reference Pt	H&P 531 (RKB)	H&P 531 (RKB) to Ground Level at Slot (Slot A)	30.00ft
MD Reference Pt	H&P 531 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	161.17°

RECEIVED  
 Office of Oil and Gas  
 JUN 2 2023  
 WV Department of  
 Environmental Protection





# Actual Wellpath Report

Trainer Unit 1H AWP Proj: 22436'  
Page 2 of 12



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Trainer Unit 1H
Field	Doddridge	API	47-017-06939-0000
Facility	Lemley Pad	Wellbore	Trainer Unit 1H AWB
Slot	Slot A		

WELLPATH DATA (249 stations) † = interpolated, ‡ = extrapolated station																
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS ["/100ft]	Build Rate ["/100ft]	Turn Rate ["/100ft]	Comments
0.00†	0.000	39.490	0.00	0.00	0.00	0.00	1730800.36	14280923.68	39°19'34.8990"N	80°40'49.3930"W	0.00	0.000	0.00	0.00	0.00	
30.00	0.000	39.490	30.00	0.00	0.00	0.00	1730800.36	14280923.68	39°19'34.8990"N	80°40'49.3930"W	0.00	0.000	0.00	0.00	0.00	
50.00	0.440	39.490	50.00	-0.04	0.06	0.05	1730800.41	14280923.74	39°19'34.8996"N	80°40'49.3924"W	0.08	39.490	2.20	2.20	0.00	Gyrodata MS Gyro <17-1/2"> (50'-915')
100.00	0.520	49.340	100.00	-0.23	0.36	0.34	1730800.70	14280924.04	39°19'34.9025"N	80°40'49.3886"W	0.49	43.998	0.23	0.16	19.70	
150.00	0.600	55.730	150.00	-0.38	0.65	0.73	1730801.09	14280924.33	39°19'34.9054"N	80°40'49.3837"W	0.98	48.354	0.20	0.16	12.78	
200.00	0.610	58.090	199.99	-0.51	0.94	1.17	1730801.53	14280924.62	39°19'34.9082"N	80°40'49.3780"W	1.50	51.353	0.05	0.02	4.72	
250.00	0.710	105.760	249.99	-0.39	1.00	1.70	1730802.06	14280924.67	39°19'34.9088"N	80°40'49.3714"W	1.97	59.624	1.08	0.20	95.34	
300.00	0.800	123.900	299.99	0.06	0.72	2.29	1730802.64	14280924.40	39°19'34.9060"N	80°40'49.3639"W	2.40	72.599	0.51	0.18	36.28	
350.00	0.730	130.210	349.98	0.61	0.32	2.82	1730803.18	14280924.00	39°19'34.9020"N	80°40'49.3571"W	2.84	83.603	0.22	-0.14	12.62	
400.00	0.460	147.010	399.98	1.08	-0.06	3.17	1730803.53	14280923.62	39°19'34.8983"N	80°40'49.3527"W	3.17	91.047	0.64	-0.54	33.60	
450.00	0.230	206.680	449.98	1.34	-0.32	3.24	1730803.59	14280923.36	39°19'34.8957"N	80°40'49.3519"W	3.25	95.578	0.79	-0.46	119.34	
500.00	0.240	189.280	499.98	1.51	-0.51	3.17	1730803.53	14280923.17	39°19'34.8938"N	80°40'49.3527"W	3.21	99.112	0.14	0.02	-34.80	
550.00	0.260	195.070	549.98	1.69	-0.72	3.13	1730803.49	14280922.96	39°19'34.8917"N	80°40'49.3533"W	3.21	102.999	0.06	0.04	11.58	
600.00	0.400	194.910	599.98	1.93	-1.00	3.05	1730803.41	14280922.68	39°19'34.8890"N	80°40'49.3542"W	3.21	108.139	0.28	0.28	-0.32	
650.00	0.220	211.930	649.98	2.14	-1.25	2.96	1730803.32	14280922.43	39°19'34.8865"N	80°40'49.3554"W	3.21	112.918	0.40	-0.36	34.04	
700.00	0.290	238.970	699.97	2.23	-1.40	2.80	1730803.16	14280922.28	39°19'34.8851"N	80°40'49.3575"W	3.13	116.532	0.27	0.14	54.08	
750.00	0.460	252.770	749.97	2.25	-1.52	2.50	1730802.86	14280922.16	39°19'34.8839"N	80°40'49.3613"W	2.92	121.350	0.38	0.34	27.60	
800.00	0.340	238.070	799.97	2.27	-1.66	2.18	1730802.54	14280922.02	39°19'34.8825"N	80°40'49.3654"W	2.74	127.279	0.31	-0.24	-29.40	
850.00	0.330	252.470	849.97	2.30	-1.78	1.92	1730802.28	14280921.90	39°19'34.8813"N	80°40'49.3687"W	2.62	132.901	0.17	-0.02	28.80	
900.00	0.250	264.160	899.97	2.28	-1.84	1.67	1730802.03	14280921.84	39°19'34.8808"N	80°40'49.3718"W	2.48	137.689	0.20	-0.16	23.38	
915.00	0.220	275.620	914.97	2.26	-1.84	1.61	1730801.97	14280921.84	39°19'34.8808"N	80°40'49.3726"W	2.44	138.760	0.37	-0.20	76.40	
1044.00	0.150	284.160	1043.97	2.06	-1.77	1.20	1730801.56	14280921.91	39°19'34.8814"N	80°40'49.3778"W	2.14	145.883	0.06	-0.05	6.62	APS EM <12-1/4"> (915')(1044'-3220')
1139.00	0.240	344.940	1138.97	1.80	-1.55	1.03	1730801.39	14280922.13	39°19'34.8836"N	80°40'49.3800"W	1.86	146.432	0.22	0.09	63.98	
1233.00	0.000	351.850	1232.97	1.60	-1.36	0.98	1730801.34	14280922.32	39°19'34.8855"N	80°40'49.3807"W	1.67	144.290	0.26	-0.26	0.00	
1327.00	0.250	279.860	1326.97	1.50	-1.32	0.77	1730801.13	14280922.36	39°19'34.8859"N	80°40'49.3832"W	1.53	149.664	0.27	0.27	0.00	
1422.00	0.370	308.100	1421.97	1.15	-1.10	0.33	1730800.69	14280922.58	39°19'34.8881"N	80°40'49.3889"W	1.15	163.342	0.20	0.13	29.73	
1517.00	0.270	355.030	1516.97	0.67	-0.69	0.07	1730800.43	14280922.99	39°19'34.8922"N	80°40'49.3922"W	0.69	174.353	0.29	-0.11	49.40	
1612.00	0.400	322.900	1611.96	0.14	-0.20	-0.15	1730800.21	14280923.48	39°19'34.8970"N	80°40'49.3950"W	0.25	217.374	0.24	0.14	-33.82	
1706.00	0.170	339.840	1705.96	-0.31	0.19	-0.40	1730799.96	14280923.87	39°19'34.9009"N	80°40'49.3981"W	0.44	296.028	0.26	-0.24	18.02	
1800.00	0.400	320.700	1799.96	-0.76	0.58	-0.65	1730799.71	14280924.26	39°19'34.9047"N	80°40'49.4013"W	0.87	311.541	0.26	0.24	-20.36	

RECEIVED  
Office of Oil and Gas  
JUN 2 2023  
WV Department of  
Environmental Protection



# Actual Wellpath Report

Trainer Unit 1H AWP Proj: 22436'  
Page 3 of 12



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Trainer Unit 1H
Field	Doddridge	API	47-017-06939-0000
Facility	Lemley Pad	Wellbore	Trainer Unit 1H AWB
Slot	Slot A		

WELLPATH DATA (249 stations)																	
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments	
1895.00	0.240	327.750	1894.96	-1.26	1.00	-0.97	1730799.39	14280924.68	39°19'34.9089"N	80°40'49.4053"W	1.40	315.992	0.17	-0.17	7.42		
1990.00	0.210	273.080	1989.96	-1.52	1.18	-1.25	1730799.11	14280924.86	39°19'34.9107"N	80°40'49.4089"W	1.72	313.393	0.22	-0.03	-57.55		
2084.00	0.170	333.690	2083.96	-1.72	1.32	-1.48	1730798.88	14280925.00	39°19'34.9120"N	80°40'49.4118"W	1.98	311.570	0.21	-0.04	64.48		
2179.00	0.120	310.160	2178.96	-1.95	1.51	-1.62	1730798.74	14280925.19	39°19'34.9139"N	80°40'49.4136"W	2.21	312.881	0.08	-0.05	-24.77		
2274.00	0.240	272.290	2273.96	-2.11	1.58	-1.90	1730798.46	14280925.26	39°19'34.9146"N	80°40'49.4171"W	2.47	309.763	0.17	0.13	-39.86		
2368.00	0.330	305.260	2367.96	-2.40	1.74	-2.31	1730798.05	14280925.42	39°19'34.9163"N	80°40'49.4224"W	2.90	306.973	0.20	0.10	35.07		
2463.00	0.070	299.700	2462.96	-2.66	1.93	-2.59	1730797.77	14280925.61	39°19'34.9181"N	80°40'49.4259"W	3.23	306.698	0.27	-0.27	-5.85		
2557.00	0.210	329.220	2556.96	-2.87	2.11	-2.73	1730797.63	14280925.78	39°19'34.9199"N	80°40'49.4276"W	3.44	307.679	0.16	0.15	31.40		
2652.00	0.210	324.670	2651.96	-3.21	2.40	-2.92	1730797.44	14280926.08	39°19'34.9228"N	80°40'49.4300"W	3.78	309.421	0.02	0.00	-4.79		
2746.00	0.120	273.410	2745.96	-3.41	2.54	-3.11	1730797.25	14280926.22	39°19'34.9242"N	80°40'49.4325"W	4.02	309.242	0.17	-0.10	-54.53		
2841.00	0.270	295.890	2840.96	-3.61	2.65	-3.41	1730796.95	14280926.33	39°19'34.9253"N	80°40'49.4364"W	4.32	307.784	0.17	0.16	23.66		
2935.00	0.440	259.700	2934.95	-3.82	2.68	-3.97	1730796.39	14280926.36	39°19'34.9256"N	80°40'49.4434"W	4.79	304.022	0.29	0.18	-38.50		
3030.00	0.300	218.560	3029.95	-3.74	2.42	-4.48	1730795.88	14280926.10	39°19'34.9230"N	80°40'49.4500"W	5.09	298.358	0.31	-0.15	-43.31		
3125.00	0.430	230.480	3124.95	-3.48	2.00	-4.91	1730795.45	14280925.68	39°19'34.9189"N	80°40'49.4554"W	5.30	292.134	0.16	0.14	12.55		
3220.00	0.550	301.720	3219.95	-3.70	2.01	-5.58	1730794.79	14280925.69	39°19'34.9191"N	80°40'49.4639"W	5.93	289.835	0.61	0.13	74.99		
3317.00	0.420	157.150	3316.95	-3.71	1.93	-5.83	1730794.53	14280925.61	39°19'34.9182"N	80°40'49.4672"W	6.14	288.292	0.95	-0.13	-149.04	APS EM <8-3/4"> (3220')(3317'-6444')	
3411.00	2.650	328.700	3410.92	-5.49	3.47	-6.83	1730793.53	14280927.15	39°19'34.9335"N	80°40'49.4798"W	7.66	296.923	3.26	2.37	182.50		
3506.00	5.310	329.000	3505.68	-11.93	9.11	-10.23	1730790.13	14280932.79	39°19'34.9894"N	80°40'49.5228"W	13.70	311.683	2.80	2.80	0.32		
3603.00	7.290	332.770	3602.09	-22.41	18.43	-15.36	1730785.00	14280942.11	39°19'35.0817"N	80°40'49.5877"W	24.00	320.192	2.08	2.04	3.89		
3698.00	7.500	331.920	3696.30	-34.49	29.26	-21.04	1730779.33	14280952.93	39°19'35.1889"N	80°40'49.6594"W	36.04	324.286	0.25	0.22	-0.89		
3793.00	7.020	330.110	3790.54	-46.31	39.77	-26.85	1730773.52	14280963.43	39°19'35.2930"N	80°40'49.7329"W	47.98	325.973	0.56	-0.51	-1.91		
3887.00	7.650	336.980	3883.77	-58.18	50.51	-32.16	1730768.21	14280974.17	39°19'35.3993"N	80°40'49.8000"W	59.88	327.513	1.15	0.67	7.31		
3982.00	7.490	338.890	3977.94	-70.68	62.10	-36.86	1730763.51	14280985.76	39°19'35.5141"N	80°40'49.8593"W	72.22	329.307	0.31	-0.17	2.01		
4076.00	6.930	335.320	4071.20	-82.44	72.97	-41.44	1730758.94	14280996.62	39°19'35.6216"N	80°40'49.9170"W	83.91	330.409	0.76	-0.60	-3.80		
4171.00	7.780	339.460	4165.42	-94.57	84.20	-46.09	1730754.29	14281007.85	39°19'35.7328"N	80°40'49.9757"W	95.99	331.306	1.05	0.89	4.36		
4266.00	9.390	339.430	4259.35	-108.74	97.48	-51.07	1730749.31	14281021.12	39°19'35.8642"N	80°40'50.0385"W	110.04	332.351	1.69	1.69	-0.03		
4360.00	8.810	336.470	4352.17	-123.58	111.26	-56.63	1730743.75	14281034.89	39°19'36.0006"N	80°40'50.1087"W	124.84	333.022	0.79	-0.62	-3.15		
4454.00	8.940	339.180	4445.04	-138.06	124.68	-62.10	1730738.28	14281048.31	39°19'36.1335"N	80°40'50.1777"W	139.29	333.523	0.47	0.14	2.88		
4549.00	9.840	339.430	4538.77	-153.55	139.18	-67.58	1730732.81	14281062.81	39°19'36.2770"N	80°40'50.2467"W	154.72	334.101	0.95	0.95	0.26		
4643.00	8.510	335.210	4631.56	-168.49	153.02	-73.32	1730727.07	14281076.64	39°19'36.4139"N	80°40'50.3191"W	169.68	334.399	1.58	-1.41	-4.49		

RECEIVED  
Office of Oil and Gas  
JUN 2 2023  
WV Department of  
Environmental Protection



# Actual Wellpath Report

Trainer Unit 1H AWP Proj: 22436'  
Page 4 of 12



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Trainer Unit 1H
Field	Doddridge	API	47-017-06939-0000
Facility	Lemley Pad	Wellbore	Trainer Unit 1H AWB
Slot	Slot A		

WELLPATH DATA (249 stations) † = interpolated, ‡ = extrapolated station																
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
4738.00	9.440	336.730	4725.40	-183.25	166.56	-79.34	1730721.05	14281090.17	39°19'36.5479"N	80°40'50.3952"W	184.49	334.528	1.01	0.98	1.60	
4833.00	11.300	341.830	4818.85	-200.33	182.56	-85.32	1730715.07	14281106.17	39°19'36.7063"N	80°40'50.4706"W	201.51	334.950	2.18	1.96	5.37	
4927.00	10.110	336.050	4911.21	-217.76	198.85	-91.55	1730708.85	14281122.45	39°19'36.8675"N	80°40'50.5490"W	218.91	335.280	1.70	-1.27	-6.15	
5022.00	8.120	329.740	5005.01	-232.64	212.27	-98.31	1730702.09	14281135.86	39°19'37.0004"N	80°40'50.6345"W	233.93	335.149	2.34	-2.09	-6.64	
5117.00	8.480	330.940	5099.01	-246.11	224.19	-105.10	1730695.31	14281147.78	39°19'37.1184"N	80°40'50.7203"W	247.60	334.883	0.42	0.38	1.26	
5211.00	9.510	343.730	5191.87	-260.69	237.70	-110.64	1730689.76	14281161.29	39°19'37.2522"N	80°40'50.7902"W	262.19	335.040	2.39	1.10	13.61	
5306.00	10.220	342.750	5285.46	-276.95	253.28	-115.34	1730685.07	14281176.86	39°19'37.4063"N	80°40'50.8493"W	278.31	335.517	0.77	0.75	-1.03	
5401.00	11.270	340.700	5378.79	-294.66	270.09	-120.90	1730679.50	14281193.67	39°19'37.5727"N	80°40'50.9194"W	295.92	335.885	1.18	1.11	-2.16	
5495.00	9.960	333.030	5471.19	-311.89	286.01	-127.63	1730672.78	14281209.58	39°19'37.7302"N	80°40'51.0042"W	313.19	335.952	2.05	-1.39	-8.16	
5593.00	9.880	334.240	5567.72	-328.63	301.13	-135.12	1730665.29	14281224.70	39°19'37.8800"N	80°40'51.0990"W	330.06	335.833	0.23	-0.08	1.23	
5687.00	9.290	333.510	5660.41	-344.16	315.19	-142.01	1730658.40	14281238.74	39°19'38.0191"N	80°40'51.1860"W	345.70	335.745	0.64	-0.63	-0.78	
5782.00	9.780	339.060	5754.10	-359.82	329.59	-148.32	1730652.10	14281253.14	39°19'38.1617"N	80°40'51.2656"W	361.42	335.772	1.10	0.52	5.84	
5877.00	10.680	343.520	5847.59	-376.68	345.56	-153.70	1730646.72	14281269.11	39°19'38.3198"N	80°40'51.3333"W	378.20	336.022	1.26	0.95	4.69	
5972.00	7.900	335.670	5941.34	-391.98	359.96	-158.89	1730641.53	14281283.50	39°19'38.4622"N	80°40'51.3987"W	393.47	336.183	3.21	-2.93	-8.26	
6066.00	6.710	342.610	6034.58	-403.90	371.09	-163.19	1730637.23	14281294.62	39°19'38.5723"N	80°40'51.4530"W	405.38	336.262	1.57	-1.27	7.38	
6160.00	8.280	339.380	6127.77	-416.15	382.66	-167.22	1730633.21	14281306.19	39°19'38.6869"N	80°40'51.5037"W	417.60	336.396	1.73	1.67	-3.44	
6255.00	6.310	336.950	6222.00	-428.20	393.87	-171.67	1730628.76	14281317.39	39°19'38.7978"N	80°40'51.5598"W	429.65	336.450	2.10	-2.07	-2.56	
6350.00	6.100	314.550	6316.45	-437.92	402.22	-177.31	1730623.12	14281325.74	39°19'38.8805"N	80°40'51.6313"W	439.56	336.210	2.54	-0.22	-23.58	
6444.00	7.620	273.390	6409.83	-444.74	406.09	-187.10	1730613.34	14281329.61	39°19'38.9191"N	80°40'51.7556"W	447.12	335.263	5.34	1.62	-43.79	
6558.00	4.780	245.410	6523.18	-447.13	404.56	-198.97	1730601.47	14281328.08	39°19'38.9044"N	80°40'51.9067"W	450.84	333.812	3.57	-2.49	-24.54	BH AT Curve <8-1/2"> (6444')(6558'-22411')
6653.00	8.680	167.470	6617.66	-439.59	395.90	-201.02	1730599.42	14281319.42	39°19'38.8189"N	80°40'51.9332"W	444.01	333.081	9.46	4.11	-82.04	
6747.00	18.060	170.200	6709.01	-418.10	374.57	-196.99	1730603.45	14281298.10	39°19'38.6079"N	80°40'51.8829"W	423.21	332.260	10.00	9.98	2.90	
6812.00†	22.848	167.367	6769.90	-395.59	352.31	-192.51	1730607.93	14281275.85	39°19'38.3878"N	80°40'51.8269"W	401.48	331.347	7.52	7.37	-4.36	Sycamore: 6812' MD
6842.00	25.070	166.410	6797.31	-383.47	340.45	-189.74	1730610.69	14281264.00	39°19'38.2705"N	80°40'51.7922"W	389.75	330.868	7.52	7.41	-3.19	
6936.00	33.570	160.270	6879.21	-337.56	296.54	-176.26	1730624.17	14281220.10	39°19'37.8360"N	80°40'51.6226"W	344.97	329.273	9.58	9.04	-6.53	
6977.00†	36.696	162.130	6912.74	-313.97	274.20	-168.67	1730631.75	14281197.77	39°19'37.6150"N	80°40'51.5271"W	321.93	328.403	8.06	7.62	4.54	Middlesex: 6977' MD
7031.00	40.850	164.200	6954.83	-280.18	241.84	-158.91	1730641.51	14281165.42	39°19'37.2948"N	80°40'51.4043"W	289.37	326.691	8.06	7.69	3.83	
7126.00	51.710	162.190	7020.40	-211.67	176.25	-138.99	1730661.43	14281099.86	39°19'36.6458"N	80°40'51.1537"W	224.46	321.741	11.53	11.43	-2.12	
7202.00†	56.514	159.477	7064.94	-150.13	118.13	-118.74	1730681.67	14281041.76	39°19'36.0707"N	80°40'50.8987"W	167.49	314.853	6.95	6.32	-3.57	Burkett: 7202' MD
7220.00	57.660	158.880	7074.72	-135.03	104.01	-113.37	1730687.04	14281027.64	39°19'35.9309"N	80°40'50.8309"W	153.85	312.534	6.95	6.37	-3.32	

RECEIVED  
 Office of Oil and Gas  
 JUN 2 2023  
 Environmental Protection  
 W.V. Department of



# Actual Wellpath Report

Trainer Unit 1H AWP Proj: 22436'  
Page 5 of 12



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Trainer Unit 1H
Field	Doddridge	API	47-017-06939-0000
Facility	Lemley Pad	Wellbore	Trainer Unit 1H AWB
Slot	Slot A		

WELLPATH DATA (249 stations) † = interpolated, ‡ = extrapolated station																
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS ["/100ft]	Build Rate ["/100ft]	Turn Rate ["/100ft]	Comments
7256.00†	58.408	158.323	7093.78	-104.52	75.57	-102.22	1730698.18	14280999.22	39°19'35.6495"N	80°40'50.6904"W	127.12	306.474	2.46	2.08	-1.55	Tully: 7256' MD
7315.00	59.640	157.430	7124.15	-54.02	28.71	-83.17	1730717.22	14280952.38	39°19'35.1857"N	80°40'50.4501"W	87.99	289.045	2.46	2.09	-1.51	
7372.00†	64.947	159.695	7150.64	-3.63	-18.25	-64.76	1730735.63	14280905.44	39°19'34.7209"N	80°40'50.2179"W	67.28	254.262	9.95	9.31	3.97	Hamilton: 7372' MD
7409.00	68.410	161.060	7165.29	30.34	-50.25	-53.35	1730747.03	14280873.45	39°19'34.4042"N	80°40'50.0742"W	73.29	226.717	9.95	9.36	3.69	
7437.00†	70.504	162.159	7175.11	56.56	-75.13	-45.08	1730755.29	14280848.58	39°19'34.1580"N	80°40'49.9701"W	87.62	210.968	8.33	7.48	3.92	Marcellus POE: 7437' MD
7504.00	75.540	164.680	7194.67	120.56	-136.52	-26.82	1730773.55	14280787.21	39°19'33.5506"N	80°40'49.7405"W	139.13	191.116	8.33	7.52	3.76	
7598.00	83.800	163.880	7211.51	212.82	-225.46	-1.78	1730798.58	14280698.31	39°19'32.6707"N	80°40'49.4258"W	225.47	180.453	8.83	8.79	-0.85	
7693.00	90.120	160.410	7216.55	307.61	-315.70	27.29	1730827.64	14280608.11	39°19'31.7778"N	80°40'49.0599"W	316.87	175.059	7.59	6.65	-3.65	
7788.00	90.340	160.460	7216.17	402.60	-405.21	59.11	1730859.44	14280518.63	39°19'30.8920"N	80°40'48.6591"W	409.50	171.701	0.24	0.23	0.05	
7882.00	89.910	160.330	7215.97	496.59	-493.76	90.65	1730890.97	14280430.11	39°19'30.0157"N	80°40'48.2618"W	502.01	169.597	0.48	-0.46	-0.14	
7977.00	90.920	160.820	7215.28	591.58	-583.35	122.24	1730922.55	14280340.56	39°19'29.1291"N	80°40'47.8638"W	596.02	168.165	1.18	1.06	0.52	
8071.00	88.890	159.060	7215.43	685.55	-671.64	154.48	1730954.78	14280252.31	39°19'28.2554"N	80°40'47.4575"W	689.17	167.047	2.86	-2.16	-1.87	
8166.00	91.690	161.650	7214.95	780.52	-761.09	186.41	1730986.70	14280162.89	39°19'27.3701"N	80°40'47.0552"W	783.59	166.238	4.01	2.95	2.73	
8261.00	89.080	158.260	7214.31	875.48	-850.31	218.96	1731019.24	14280073.70	39°19'26.4872"N	80°40'46.6450"W	878.05	165.559	4.50	-2.75	-3.57	
8355.00	91.320	162.640	7213.99	969.44	-938.87	250.41	1731050.67	14279985.18	39°19'25.6108"N	80°40'46.2489"W	971.69	165.066	5.23	2.38	4.66	
8449.00	92.400	158.870	7210.93	1063.37	-1027.55	281.37	1731081.62	14279896.53	39°19'24.7332"N	80°40'45.8589"W	1065.38	164.686	4.17	1.15	-4.01	
8544.00	88.680	158.630	7210.04	1158.26	-1116.07	315.79	1731116.03	14279808.05	39°19'23.8571"N	80°40'45.4249"W	1159.89	164.201	3.92	-3.92	-0.25	
8639.00	90.580	160.890	7210.65	1253.22	-1205.19	348.66	1731148.88	14279718.96	39°19'22.9751"N	80°40'45.0108"W	1254.61	163.865	3.11	2.00	2.38	
8733.00	90.220	160.280	7210.00	1347.22	-1293.84	379.90	1731180.11	14279630.34	39°19'22.0978"N	80°40'44.6172"W	1348.47	163.637	0.75	-0.38	-0.65	
8828.00	89.970	159.690	7209.84	1442.19	-1383.11	412.42	1731212.61	14279541.12	39°19'21.2145"N	80°40'44.2075"W	1443.28	163.396	0.67	-0.26	-0.62	
8923.00	90.650	160.650	7209.32	1537.18	-1472.47	444.64	1731244.83	14279451.79	39°19'20.3301"N	80°40'43.8015"W	1538.14	163.197	1.24	0.72	1.01	
9017.00	90.710	160.410	7208.21	1631.16	-1561.09	475.97	1731276.14	14279363.20	39°19'19.4531"N	80°40'43.4068"W	1632.04	163.044	0.26	0.06	-0.26	
9112.00	90.800	160.230	7206.96	1726.15	-1650.53	507.96	1731308.12	14279273.80	39°19'18.5680"N	80°40'43.0038"W	1726.93	162.894	0.21	0.09	-0.19	
9207.00	90.180	161.320	7206.14	1821.14	-1740.23	539.24	1731339.39	14279184.13	39°19'17.6804"N	80°40'42.6099"W	1821.86	162.783	1.32	-0.65	1.15	
9302.00	89.880	160.830	7206.09	1916.14	-1830.09	570.05	1731370.19	14279094.31	39°19'16.7911"N	80°40'42.2219"W	1916.82	162.699	0.60	-0.32	-0.52	
9396.00	90.950	161.060	7205.41	2010.13	-1918.94	600.74	1731400.86	14279005.49	39°19'15.9119"N	80°40'41.8355"W	2010.77	162.617	1.16	1.14	0.24	
9491.00	91.230	160.500	7203.61	2105.11	-2008.63	632.01	1731432.12	14278915.84	39°19'15.0244"N	80°40'41.4417"W	2105.71	162.534	0.66	0.29	-0.59	
9585.00	88.030	159.930	7204.21	2199.09	-2097.06	663.82	1731463.92	14278827.44	39°19'14.1492"N	80°40'41.0409"W	2199.62	162.435	3.46	-3.40	-0.61	
9679.00	91.510	161.220	7204.59	2293.06	-2185.70	695.08	1731495.16	14278738.84	39°19'13.2720"N	80°40'40.6472"W	2293.56	162.359	3.95	3.70	1.37	
9774.00	90.520	161.680	7202.91	2388.05	-2275.75	725.29	1731525.37	14278648.83	39°19'12.3810"N	80°40'40.2668"W	2388.53	162.323	1.15	-1.04	0.48	

RECEIVED  
Office of Oil and Gas  
JUN 2 2023  
WV Department of  
Environmental Protection



# Actual Wellpath Report

Trainer Unit 1H AWP Proj: 22436'  
Page 6 of 12



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Trainer Unit 1H
Field	Doddridge	API	47-017-06939-0000
Facility	Lemley Pad	Wellbore	Trainer Unit 1H AWP
Slot	Slot A		

WELLPATH DATA (249 stations)																
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
9869.00	89.600	161.380	7202.81	2483.04	-2365.85	755.39	1731555.45	14278558.76	39°19'11.4893"N	80°40'39.8879"W	2483.52	162.292	1.02	-0.97	-0.32	
9964.00	91.510	162.470	7201.89	2578.02	-2456.15	784.86	1731584.91	14278468.49	39°19'10.5958"N	80°40'39.5170"W	2578.51	162.279	2.31	2.01	1.15	
10058.00	90.860	160.730	7199.94	2672.00	-2545.33	814.53	1731614.57	14278379.35	39°19'9.7134"N	80°40'39.1436"W	2672.48	162.255	1.98	-0.69	-1.85	
10153.00	90.180	160.870	7199.08	2766.99	-2635.04	845.77	1731645.79	14278289.68	39°19'8.8256"N	80°40'38.7502"W	2767.44	162.205	0.73	-0.72	0.15	
10247.00	89.600	159.830	7199.26	2860.98	-2723.56	877.38	1731677.39	14278201.19	39°19'7.9496"N	80°40'38.3521"W	2861.39	162.144	1.27	-0.62	-1.11	
10342.00	92.120	163.520	7197.84	2955.94	-2813.71	907.23	1731707.24	14278111.07	39°19'7.0575"N	80°40'37.9762"W	2956.36	162.129	4.70	2.65	3.88	
10437.00	91.110	158.680	7195.16	3050.87	-2903.52	937.99	1731737.98	14278021.30	39°19'6.1688"N	80°40'37.5890"W	3051.27	162.097	5.20	-1.06	-5.09	
10531.00	90.030	162.240	7194.22	3144.85	-2992.09	969.42	1731769.40	14277932.76	39°19'5.2923"N	80°40'37.1931"W	3145.21	162.048	3.96	-1.15	3.79	
10626.00	90.030	160.630	7194.17	3239.84	-3082.14	999.66	1731799.63	14277842.75	39°19'4.4012"N	80°40'36.8124"W	3240.21	162.030	1.69	0.00	-1.69	
10721.00	90.180	161.160	7194.00	3334.84	-3171.91	1030.76	1731830.71	14277753.01	39°19'3.5129"N	80°40'36.4209"W	3335.19	161.998	0.58	0.16	0.56	
10815.00	90.120	161.330	7193.75	3428.84	-3260.92	1060.98	1731860.92	14277664.04	39°19'2.6321"N	80°40'36.0404"W	3429.18	161.977	0.19	-0.06	0.18	
10910.00	88.550	160.790	7194.85	3523.83	-3350.77	1091.81	1731891.74	14277574.23	39°19'1.7430"N	80°40'35.6522"W	3524.16	161.952	1.75	-1.65	-0.57	
11004.00	92.190	163.260	7194.25	3617.79	-3440.15	1120.81	1731920.73	14277484.88	39°19'0.8584"N	80°40'35.2873"W	3618.13	161.954	4.68	3.87	2.63	
11099.00	88.980	158.150	7193.28	3712.74	-3529.77	1152.19	1731952.10	14277395.29	39°18'59.9716"N	80°40'34.8921"W	3713.06	161.922	6.35	-3.38	-5.38	
11193.00	89.750	160.900	7194.32	3806.69	-3617.82	1185.06	1731984.96	14277307.28	39°18'59.1002"N	80°40'34.4779"W	3806.97	161.863	3.04	0.82	2.93	
11288.00	90.090	161.350	7194.45	3901.69	-3707.71	1215.80	1732015.68	14277217.43	39°18'58.2107"N	80°40'34.0909"W	3901.96	161.845	0.59	0.36	0.47	
11383.00	89.910	161.370	7194.45	3996.69	-3797.73	1246.16	1732046.03	14277127.44	39°18'57.3199"N	80°40'33.7087"W	3996.95	161.834	0.19	-0.19	0.02	
11477.00	90.950	161.440	7193.75	4090.68	-3886.82	1276.13	1732075.99	14277038.39	39°18'56.4383"N	80°40'33.3314"W	4090.95	161.824	1.11	1.11	0.07	
11572.00	90.800	161.190	7192.30	4185.67	-3976.80	1306.56	1732106.41	14276948.44	39°18'55.5479"N	80°40'32.9483"W	4185.93	161.812	0.31	-0.16	-0.26	
11667.00	90.030	161.350	7191.61	4280.67	-4066.76	1337.07	1732136.90	14276858.51	39°18'54.6576"N	80°40'32.5643"W	4280.93	161.800	0.83	-0.81	0.17	
11762.00	93.300	160.380	7188.85	4375.61	-4156.46	1368.19	1732168.01	14276768.85	39°18'53.7700"N	80°40'32.1725"W	4375.86	161.780	3.59	3.44	-1.02	
11856.00	92.060	155.890	7184.45	4469.35	-4243.58	1403.15	1732202.96	14276681.76	39°18'52.9077"N	80°40'31.7316"W	4469.54	161.703	4.95	-1.32	-4.78	
11951.00	87.540	155.350	7184.78	4563.88	-4330.09	1442.36	1732242.15	14276595.29	39°18'52.0513"N	80°40'31.2368"W	4564.00	161.577	4.79	-4.76	-0.57	
12045.00	90.000	162.610	7186.80	4657.72	-4417.75	1476.04	1732275.82	14276507.67	39°18'51.1837"N	80°40'30.8123"W	4657.81	161.525	8.15	2.62	7.72	
12139.00	90.620	160.580	7186.29	4751.71	-4506.93	1505.71	1732305.48	14276418.52	39°18'50.3012"N	80°40'30.4388"W	4751.80	161.526	2.26	0.66	-2.16	
12234.00	90.920	161.310	7185.02	4846.70	-4596.72	1536.73	1732336.48	14276328.77	39°18'49.4127"N	80°40'30.0483"W	4846.79	161.515	0.83	0.32	0.77	
12329.00	91.110	163.420	7183.33	4941.66	-4687.24	1565.50	1732365.25	14276238.29	39°18'48.5170"N	80°40'29.6864"W	4941.76	161.531	2.23	0.20	2.22	
12423.00	89.910	163.730	7182.50	5035.57	-4777.39	1592.08	1732391.81	14276148.16	39°18'47.6250"N	80°40'29.3523"W	5035.69	161.569	1.32	-1.28	0.33	
12517.00	89.660	160.080	7182.85	5129.55	-4866.73	1621.27	1732420.99	14276058.86	39°18'46.7410"N	80°40'28.9851"W	5129.68	161.575	3.89	-0.27	-3.88	
12612.00	91.450	163.290	7181.93	5224.52	-4956.90	1651.12	1732450.83	14275968.73	39°18'45.8488"N	80°40'28.6094"W	5224.65	161.577	3.87	1.88	3.38	

RECEIVED  
Office of Oil and Gas  
JUN 2 2023  
WV Department of  
Environmental Protection



# Actual Wellpath Report

Trainer Unit 1H AWP Proj: 22436'  
Page 7 of 12



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Trainer Unit 1H
Field	Doddridge	API	47-017-06939-0000
Facility	Lemley Pad	Wellbore	Trainer Unit 1H AWP
Slot	Slot A		

WELLPATH DATA (249 stations)																
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
12706.00	91.420	163.350	7179.58	5318.43	-5046.91	1678.09	1732477.79	14275878.75	39°18'44.9581"N	80°40'28.2704"W	5318.58	161.608	0.07	-0.03	0.06	
12801.00	90.770	161.420	7177.76	5413.38	-5137.44	1706.83	1732506.52	14275788.26	39°18'44.0624"N	80°40'27.9089"W	5413.55	161.622	2.14	-0.68	-2.03	
12896.00	91.790	163.990	7175.64	5508.32	-5228.11	1735.06	1732534.74	14275697.62	39°18'43.1652"N	80°40'27.5538"W	5508.50	161.640	2.91	1.07	2.71	
12990.00	90.890	164.280	7173.44	5602.16	-5318.50	1760.75	1732560.42	14275607.26	39°18'42.2709"N	80°40'27.2312"W	5602.39	161.682	1.01	-0.96	0.31	
13084.00	90.180	161.890	7172.56	5696.10	-5408.43	1788.10	1732587.76	14275517.38	39°18'41.3811"N	80°40'26.8874"W	5696.35	161.705	2.65	-0.76	-2.54	
13179.00	91.110	165.040	7171.49	5791.00	-5499.48	1815.13	1732614.78	14275426.36	39°18'40.4802"N	80°40'26.5476"W	5791.29	161.734	3.46	0.98	3.32	
13273.00	88.860	162.470	7171.52	5884.89	-5589.71	1841.42	1732641.06	14275336.16	39°18'39.5875"N	80°40'26.2173"W	5885.21	161.767	3.63	-2.39	-2.73	
13368.00	92.650	162.600	7170.26	5979.84	-5680.31	1869.93	1732669.55	14275245.60	39°18'38.6910"N	80°40'25.8588"W	5980.18	161.779	3.99	3.99	0.14	
13462.00	88.710	159.370	7169.15	6073.80	-5769.14	1900.54	1732700.16	14275156.80	39°18'37.8119"N	80°40'25.4734"W	6074.13	161.766	5.42	-4.19	-3.44	
13557.00	92.030	161.970	7168.54	6168.78	-5858.77	1931.98	1732731.58	14275067.21	39°18'36.9250"N	80°40'25.0775"W	6169.09	161.750	4.44	3.49	2.74	
13652.00	89.690	160.570	7167.11	6263.76	-5948.72	1962.48	1732762.07	14274977.30	39°18'36.0349"N	80°40'24.6936"W	6264.07	161.742	2.87	-2.46	-1.47	
13746.00	91.230	160.660	7166.35	6357.75	-6037.38	1993.68	1732793.26	14274888.67	39°18'35.1574"N	80°40'24.3008"W	6358.05	161.726	1.64	1.64	0.10	
13841.00	91.630	162.030	7163.98	6452.71	-6127.36	2024.06	1732823.62	14274798.72	39°18'34.2670"N	80°40'23.9185"W	6453.01	161.720	1.50	0.42	1.44	
13935.00	90.400	159.540	7162.32	6546.69	-6216.10	2054.99	1732854.54	14274710.02	39°18'33.3889"N	80°40'23.5291"W	6546.98	161.707	2.95	-1.31	-2.65	
14030.00	91.200	160.930	7160.99	6641.66	-6305.49	2087.11	1732886.65	14274620.66	39°18'32.5042"N	80°40'23.1245"W	6641.93	161.686	1.69	0.84	1.46	
14125.00	90.710	160.820	7159.41	6736.65	-6395.24	2118.23	1732917.76	14274530.95	39°18'31.6161"N	80°40'22.7328"W	6736.91	161.674	0.53	-0.52	-0.12	
14219.00	90.890	162.370	7158.10	6830.63	-6484.42	2147.90	1732947.42	14274441.81	39°18'30.7336"N	80°40'22.3593"W	6830.90	161.673	1.66	0.19	1.65	
14314.00	88.770	160.750	7158.38	6925.62	-6574.53	2177.95	1732977.45	14274351.73	39°18'29.8419"N	80°40'21.9812"W	6925.89	161.671	2.81	-2.23	-1.71	
14409.00	91.540	164.570	7158.12	7020.56	-6665.19	2206.26	1733005.75	14274261.11	39°18'28.9449"N	80°40'21.6253"W	7020.85	161.685	4.97	2.92	4.02	
14504.00	91.260	160.740	7155.80	7115.49	-6755.82	2234.56	1733034.05	14274170.51	39°18'28.0480"N	80°40'21.2693"W	7115.79	161.698	4.04	-0.29	-4.03	
14598.00	91.170	161.820	7153.81	7209.46	-6844.83	2264.72	1733064.20	14274081.54	39°18'27.1673"N	80°40'20.8897"W	7209.76	161.692	1.15	-0.10	1.15	
14693.00	89.850	161.110	7152.96	7304.45	-6934.90	2294.92	1733094.38	14273991.81	39°18'26.2760"N	80°40'20.5097"W	7304.76	161.689	1.58	-1.39	-0.75	
14788.00	89.970	160.570	7153.11	7399.45	-7024.63	2326.10	1733125.55	14273901.81	39°18'25.3879"N	80°40'20.1172"W	7399.74	161.678	0.58	0.13	-0.57	
14883.00	90.680	161.230	7152.57	7494.45	-7114.40	2357.19	1733156.62	14273812.07	39°18'24.4996"N	80°40'19.7259"W	7494.73	161.669	1.02	0.75	0.69	
14977.00	90.310	161.360	7151.76	7588.45	-7203.43	2387.33	1733186.75	14273723.08	39°18'23.6186"N	80°40'19.3465"W	7588.73	161.664	0.42	-0.39	0.14	
15072.00	90.280	161.450	7151.27	7683.44	-7293.47	2417.62	1733217.03	14273633.07	39°18'22.7276"N	80°40'18.9653"W	7683.73	161.661	0.10	-0.03	0.09	
15166.00	90.280	161.810	7150.81	7777.44	-7382.68	2447.25	1733246.65	14273543.90	39°18'21.8448"N	80°40'18.5926"W	7777.72	161.660	0.38	0.00	0.38	
15261.00	90.150	160.900	7150.45	7872.44	-7472.69	2477.62	1733277.01	14273453.92	39°18'20.9541"N	80°40'18.2104"W	7872.72	161.657	0.97	-0.14	-0.96	
15355.00	90.340	161.250	7150.05	7966.44	-7561.61	2508.11	1733307.48	14273365.04	39°18'20.0741"N	80°40'17.8267"W	7966.71	161.650	0.42	0.20	0.37	
15450.00	89.970	160.380	7149.79	8061.43	-7651.33	2539.32	1733338.69	14273275.35	39°18'19.1862"N	80°40'17.4337"W	8061.70	161.640	1.00	-0.39	-0.92	

RECEIVED  
Office of Oil and Gas  
JUN 2 2023  
WV Department of  
Environmental Protection



# Actual Wellpath Report

Trainer Unit 1H AWP Proj: 22436'  
Page 8 of 12



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Trainer Unit 1H
Field	Doddridge	API	47-017-06939-0000
Facility	Lemley Pad	Wellbore	Trainer Unit 1H AWB
Slot	Slot A		

WELLPATH DATA (249 stations)																
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS ["/100ft]	Build Rate ["/100ft]	Turn Rate ["/100ft]	Comments
15544.00	89.970	159.970	7149.84	8155.42	-7739.76	2571.20	1733370.55	14273186.96	39°18'18.3111"N	80°40'17.0322"W	8155.67	161.623	0.44	0.00	-0.44	
15734.00	89.450	160.830	7150.81	8345.40	-7918.75	2634.94	1733434.26	14273008.04	39°18'16.5398"N	80°40'16.2297"W	8345.63	161.595	0.53	-0.27	0.45	
15828.00	90.220	161.600	7151.08	8439.39	-8007.74	2665.21	1733464.52	14272919.08	39°18'15.6591"N	80°40'15.8488"W	8439.62	161.591	1.16	0.82	0.82	
16017.00	91.660	161.610	7147.98	8628.36	-8187.05	2724.84	1733524.13	14272739.84	39°18'13.8847"N	80°40'15.0985"W	8628.59	161.591	0.76	0.76	0.01	
16112.00	89.910	157.730	7146.67	8723.29	-8276.11	2757.83	1733557.11	14272650.82	39°18'13.0034"N	80°40'14.6829"W	8723.51	161.570	4.48	-1.84	-4.08	
16207.00	90.280	160.270	7146.52	8818.22	-8364.79	2791.88	1733591.14	14272562.18	39°18'12.1256"N	80°40'14.2539"W	8818.41	161.543	2.70	0.39	2.67	
16396.00	89.780	160.800	7146.42	9007.21	-8542.99	2854.86	1733654.10	14272384.05	39°18'10.3621"N	80°40'13.4610"W	9007.38	161.522	0.39	-0.26	0.28	
16490.00	91.050	159.820	7145.74	9101.19	-8631.48	2886.53	1733685.75	14272295.59	39°18'9.4863"N	80°40'13.0623"W	9101.35	161.509	1.71	1.35	-1.04	
16585.00	89.140	157.640	7145.58	9196.09	-8720.00	2920.99	1733720.20	14272207.10	39°18'8.6102"N	80°40'12.6280"W	9196.23	161.480	3.05	-2.01	-2.29	
16680.00	91.140	160.880	7145.35	9291.02	-8808.83	2954.62	1733753.82	14272118.31	39°18'7.7310"N	80°40'12.2043"W	9291.14	161.458	4.01	2.11	3.41	
16774.00	89.480	162.160	7144.84	9385.01	-8897.98	2984.41	1733783.60	14272029.20	39°18'6.8489"N	80°40'11.8294"W	9385.13	161.458	2.23	-1.77	1.36	
16869.00	91.790	159.090	7143.78	9479.99	-8987.57	3015.92	1733815.10	14271939.63	39°18'5.9622"N	80°40'11.4328"W	9480.10	161.450	4.04	2.43	-3.23	
16963.00	89.020	159.990	7143.12	9573.94	-9075.63	3048.78	1733847.94	14271851.61	39°18'5.0906"N	80°40'11.0189"W	9574.04	161.431	3.10	-2.95	0.96	
17058.00	91.630	163.680	7142.58	9668.90	-9165.87	3078.39	1733877.54	14271761.41	39°18'4.1977"N	80°40'10.6465"W	9669.01	161.435	4.76	2.75	3.88	
17152.00	88.550	162.550	7142.43	9762.84	-9255.81	3105.68	1733904.82	14271671.51	39°18'3.3078"N	80°40'10.3034"W	9762.95	161.451	3.49	-3.28	-1.20	
17247.00	91.350	162.380	7142.52	9857.80	-9346.39	3134.30	1733933.43	14271580.96	39°18'2.4115"N	80°40'9.9436"W	9857.93	161.461	2.95	2.95	-0.18	
17342.00	90.030	164.880	7141.37	9952.70	-9437.52	3161.07	1733960.19	14271489.87	39°18'1.5098"N	80°40'9.6073"W	9952.85	161.482	2.98	-1.39	2.63	
17437.00	89.350	162.710	7141.89	10047.59	-9528.74	3187.58	1733986.69	14271398.68	39°18'0.6073"N	80°40'9.2743"W	10047.76	161.504	2.39	-0.72	-2.28	
17531.00	90.090	163.600	7142.35	10141.53	-9618.70	3214.82	1734013.92	14271308.76	39°17'59.7172"N	80°40'8.9320"W	10141.72	161.519	1.23	0.79	0.95	
17626.00	90.340	162.760	7141.99	10236.47	-9709.64	3242.31	1734041.40	14271217.86	39°17'58.8174"N	80°40'8.5866"W	10236.68	161.534	0.92	0.26	-0.88	
17721.00	91.080	162.820	7140.81	10331.43	-9800.37	3270.42	1734069.49	14271127.15	39°17'57.9196"N	80°40'8.2333"W	10331.65	161.546	0.78	0.78	0.06	
17910.00	90.120	163.630	7138.83	10520.29	-9981.32	3324.96	1734124.02	14270946.28	39°17'56.1292"N	80°40'7.5479"W	10520.55	161.576	0.66	-0.51	0.43	
18004.00	90.650	161.980	7138.20	10614.25	-10071.11	3352.75	1734151.79	14270856.52	39°17'55.2407"N	80°40'7.1986"W	10614.53	161.587	1.84	0.56	-1.76	
18098.00	90.370	164.730	7137.36	10708.17	-10161.16	3379.67	1734178.70	14270766.51	39°17'54.3497"N	80°40'6.8604"W	10708.47	161.603	2.94	-0.30	2.93	
18193.00	89.970	161.490	7137.08	10803.10	-10252.05	3407.27	1734206.29	14270675.66	39°17'53.4504"N	80°40'6.5136"W	10803.42	161.616	3.44	-0.42	-3.41	
18288.00	89.910	161.860	7137.18	10898.09	-10342.23	3437.14	1734236.15	14270585.51	39°17'52.5580"N	80°40'6.1379"W	10898.42	161.616	0.39	-0.06	0.39	
18383.00	89.290	160.620	7137.85	10993.09	-10432.18	3467.69	1734266.68	14270495.60	39°17'51.6679"N	80°40'5.7535"W	10993.42	161.613	1.46	-0.65	-1.31	
18477.00	90.150	160.400	7138.30	11087.08	-10520.79	3499.05	1734298.03	14270407.02	39°17'50.7909"N	80°40'5.3587"W	11087.40	161.604	0.94	0.91	-0.23	
18571.00	90.340	161.250	7137.90	11181.08	-10609.58	3529.92	1734328.90	14270318.27	39°17'49.9123"N	80°40'4.9701"W	11181.39	161.597	0.93	0.20	0.90	
18665.00	90.520	161.670	7137.20	11275.07	-10698.69	3559.81	1734358.77	14270229.19	39°17'49.0304"N	80°40'4.5941"W	11275.38	161.596	0.49	0.19	0.45	

RECEIVED  
Office of Oil and Gas  
JUN 2 2023  
WV Department of  
Environmental Protection



# Actual Wellpath Report

Trainer Unit 1H AWP Proj: 22436'  
Page 9 of 12



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Trainer Unit 1H
Field	Doddridge	API	47-017-06939-0000
Facility	Lemley Pad	Wellbore	Trainer Unit 1H AWB
Slot	Slot A		

WELLPATH DATA (249 stations)																
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS ["/100ft]	Build Rate ["/100ft]	Turn Rate ["/100ft]	Comments
18760.00	90.340	160.900	7136.48	11370.07	-10788.67	3590.29	1734389.24	14270139.25	39°17'48.1400"N	80°40'4.2106"W	11370.38	161.593	0.83	-0.19	-0.81	
18854.00	91.450	162.050	7135.02	11464.05	-10877.78	3620.15	1734419.09	14270050.17	39°17'47.2582"N	80°40'3.8350"W	11464.37	161.592	1.70	1.18	1.22	
18949.00	89.540	159.000	7134.20	11559.03	-10967.33	3651.82	1734450.74	14269960.66	39°17'46.3720"N	80°40'3.4363"W	11559.33	161.584	3.79	-2.01	-3.21	
19043.00	91.510	160.760	7133.33	11652.99	-11055.58	3684.15	1734483.06	14269872.44	39°17'45.4986"N	80°40'3.0292"W	11653.28	161.570	2.81	2.10	1.87	
19137.00	89.940	156.610	7132.14	11746.87	-11143.12	3718.31	1734517.21	14269784.93	39°17'44.6321"N	80°40'2.5989"W	11747.13	161.547	4.72	-1.67	-4.41	
19232.00	90.340	160.940	7131.91	11841.77	-11231.66	3752.69	1734551.58	14269696.43	39°17'43.7558"N	80°40'2.1656"W	11841.99	161.525	4.58	0.42	4.56	
19326.00	90.280	160.690	7131.40	11935.76	-11320.44	3783.58	1734582.46	14269607.69	39°17'42.8772"N	80°40'1.7769"W	11935.98	161.519	0.27	-0.06	-0.27	
19420.00	89.780	160.640	7131.35	12029.76	-11409.13	3814.70	1734613.57	14269519.03	39°17'41.9994"N	80°40'1.3852"W	12029.97	161.512	0.53	-0.53	-0.05	
19515.00	89.750	160.830	7131.74	12124.76	-11498.81	3846.05	1734644.90	14269429.38	39°17'41.1119"N	80°40'0.9907"W	12124.96	161.506	0.20	-0.03	0.20	
19609.00	89.630	160.070	7132.25	12218.75	-11587.39	3877.50	1734676.34	14269340.84	39°17'40.2353"N	80°40'0.5948"W	12218.95	161.498	0.82	-0.13	-0.81	
19704.00	91.820	160.830	7131.05	12313.72	-11676.90	3909.29	1734708.11	14269251.36	39°17'39.3495"N	80°40'0.1947"W	12313.92	161.490	2.44	2.31	0.80	
19798.00	89.110	159.830	7130.29	12407.70	-11765.40	3940.92	1734739.74	14269162.90	39°17'38.4736"N	80°39'59.7965"W	12407.88	161.481	3.07	-2.88	-1.06	
19893.00	92.190	159.850	7129.21	12502.66	-11854.57	3973.66	1734772.46	14269073.77	39°17'37.5911"N	80°39'59.3843"W	12502.83	161.469	3.24	3.24	0.02	
19988.00	89.720	161.650	7127.63	12597.63	-11944.23	4004.97	1734803.76	14268984.14	39°17'36.7038"N	80°39'58.9902"W	12597.80	161.463	3.22	-2.60	1.89	
20082.00	89.850	159.830	7127.98	12691.62	-12032.97	4035.98	1734834.75	14268895.44	39°17'35.8256"N	80°39'58.6000"W	12691.78	161.458	1.94	0.14	-1.94	
20176.00	89.480	160.110	7128.53	12785.60	-12121.28	4068.17	1734866.93	14268807.16	39°17'34.9516"N	80°39'58.1947"W	12785.75	161.447	0.49	-0.39	0.30	
20271.00	88.770	159.520	7129.98	12880.56	-12210.43	4100.95	1734899.70	14268718.04	39°17'34.0692"N	80°39'57.7820"W	12880.70	161.435	0.97	-0.75	-0.62	
20366.00	90.150	160.270	7130.87	12975.53	-12299.64	4133.60	1734932.34	14268628.87	39°17'33.1864"N	80°39'57.3709"W	12975.66	161.424	1.65	1.45	0.79	
20460.00	89.290	159.570	7131.33	13069.51	-12387.92	4165.87	1734964.60	14268540.62	39°17'32.3126"N	80°39'56.9645"W	13069.62	161.413	1.18	-0.91	-0.74	
20555.00	89.510	159.470	7132.33	13164.46	-12476.91	4199.11	1734997.82	14268451.67	39°17'31.4319"N	80°39'56.5460"W	13164.57	161.399	0.25	0.23	-0.11	
20649.00	89.750	160.200	7132.94	13258.43	-12565.15	4231.51	1735030.21	14268363.47	39°17'30.5586"N	80°39'56.1380"W	13258.53	161.388	0.82	0.26	0.78	
20744.00	89.140	159.960	7133.86	13353.41	-12654.46	4263.88	1735062.56	14268274.19	39°17'29.6747"N	80°39'55.7306"W	13353.50	161.379	0.69	-0.64	-0.25	
20839.00	89.660	161.990	7134.85	13448.40	-12744.26	4294.84	1735093.52	14268184.42	39°17'28.7860"N	80°39'55.3409"W	13448.49	161.376	2.21	0.55	2.14	
20934.00	90.340	163.270	7134.85	13543.37	-12834.93	4323.20	1735121.87	14268093.79	39°17'27.8889"N	80°39'54.9845"W	13543.46	161.385	1.53	0.72	1.35	
21028.00	90.400	162.530	7134.24	13637.32	-12924.77	4350.84	1735149.49	14268003.99	39°17'26.9999"N	80°39'54.6372"W	13637.43	161.395	0.79	0.06	-0.79	
21123.00	90.150	162.470	7133.79	13732.30	-13015.37	4379.41	1735178.05	14267913.42	39°17'26.1034"N	80°39'54.2781"W	13732.41	161.403	0.27	-0.26	-0.06	
21217.00	89.850	162.750	7133.79	13826.27	-13105.07	4407.50	1735206.13	14267823.75	39°17'25.2157"N	80°39'53.9250"W	13826.39	161.411	0.44	-0.32	0.30	
21312.00	89.940	162.080	7133.96	13921.24	-13195.63	4436.20	1735234.82	14267733.23	39°17'24.3196"N	80°39'53.5643"W	13921.37	161.418	0.71	0.09	-0.71	
21406.00	90.370	162.530	7133.71	14015.22	-13285.18	4464.77	1735263.38	14267643.71	39°17'23.4335"N	80°39'53.2051"W	14015.36	161.424	0.66	0.46	0.48	
21501.00	89.690	162.420	7133.66	14110.20	-13375.77	4493.38	1735291.98	14267553.16	39°17'22.5371"N	80°39'52.8456"W	14110.34	161.431	0.73	-0.72	-0.12	

RECEIVED  
Office of Oil and Gas  
JUN 2 2023  
WV Department of  
Environmental Protection





# Actual Wellpath Report

Trainer Unit 1H AWP Proj: 22436'  
Page 10 of 12



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Trainer Unit 1H
Field	Doddridge	API	47-017-06939-0000
Facility	Lemley Pad	Wellbore	Trainer Unit 1H AWB
Slot	Slot A		

WELLPATH DATA (249 stations) † = interpolated, ‡ = extrapolated station																
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
21596.00	89.480	161.710	7134.35	14205.18	-13466.16	4522.63	1735321.22	14267462.81	39°17'21.6427"N	80°39'52.4778"W	14205.34	161.435	0.78	-0.22	-0.75	
21690.00	89.850	163.580	7134.90	14299.15	-13555.87	4550.67	1735349.25	14267373.13	39°17'20.7550"N	80°39'52.1254"W	14299.31	161.443	2.03	0.39	1.99	
21879.00	88.120	161.920	7138.24	14488.03	-13736.33	4606.70	1735405.26	14267192.75	39°17'18.9693"N	80°39'51.4213"W	14488.22	161.460	1.27	-0.92	-0.88	
21974.00	89.450	162.560	7140.26	14582.99	-13826.78	4635.68	1735434.21	14267102.33	39°17'18.0743"N	80°39'51.0571"W	14583.18	161.465	1.55	1.40	0.67	
22069.00	89.260	162.740	7141.33	14677.95	-13917.45	4664.00	1735462.53	14267011.70	39°17'17.1771"N	80°39'50.7011"W	14678.16	161.473	0.28	-0.20	0.19	
22258.00	89.230	162.390	7143.82	14866.88	-14097.75	4720.63	1735519.13	14266831.47	39°17'15.3930"N	80°39'49.9895"W	14867.11	161.487	0.19	-0.02	-0.19	
22353.00	89.230	161.870	7145.09	14961.86	-14188.16	4749.78	1735548.27	14266741.09	39°17'14.4984"N	80°39'49.6230"W	14962.09	161.491	0.55	0.00	-0.55	
22411.00	88.920	161.840	7146.03	15019.85	-14243.27	4767.84	1735566.32	14266686.01	39°17'13.9530"N	80°39'49.3959"W	15020.08	161.492	0.54	-0.53	-0.05	
22436.00‡	88.920	161.840	7146.50	15044.84	-14267.02	4775.63	1735574.11	14266662.26	39°17'13.7180"N	80°39'49.2980"W	15045.08	161.493	0.00	0.00	0.00	Projected MD at TD: 22436'

HOLE & CASING SECTIONS - Ref Wellbore: Trainer Unit 1H AWB Ref Wellpath: Trainer Unit 1H AWP Proj: 22436'									
String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
20in Conductor	30.00	130.00	100.00	30.00	130.00	0.00	0.00	0.53	0.57
17.5in Open Hole	130.00	918.00	788.00	130.00	917.97	0.53	0.57	-1.84	1.60
13.375in Casing Surface	30.00	898.00	868.00	30.00	897.97	0.00	0.00	-1.83	1.68
12.25in Open Hole	918.00	3303.00	2385.00	917.97	3302.95	-1.84	1.60	2.01	-5.86
9.625in Casing Intermediate	30.00	3283.00	3253.00	30.00	3282.95	0.00	0.00	2.09	-5.87
8.75in Open Hole	3303.00	6521.00	3218.00	3302.95	6486.33	2.01	-5.86	405.59	-195.82
8.5in Open Hole	6521.00	22436.00	15915.00	6486.33	7146.50	405.59	-195.82	-14267.02	4775.63
5.5in Casing Production	30.00	22416.00	22386.00	30.00	7146.13	0.00	0.00	-14248.02	4769.39

RECEIVED  
Office of Oil and Gas  
JUN 2 2023  
WV Department of  
Environmental Protection



# Actual Wellpath Report

Trainer Unit 1H AWP Proj: 22436'  
Page 11 of 12



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Trainer Unit 1H
Field	Doddridge	API	47-017-06939-0000
Facility	Lemley Pad	Wellbore	Trainer Unit 1H AWB
Slot	Slot A		

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Trainer Unit 1H POE Rev-1	7166.00	-18.74	-61.45	1730738.93	14280904.95	39°19'34.7159"N	80°40'50.1759"W	point
Trainer Unit 1H BHL Rev-1	7210.00	-14268.36	4798.45	1735596.93	14266660.92	39°17'13.7039"N	80°39'49.0077"W	point
Trainer Unit 1H LP Rev-1	7210.00	-252.67	18.33	1730818.68	14280671.11	39°19'32.4011"N	80°40'49.1711"W	point
Trainer Unit 1H 50' L/R Hard Line	7500.00	-7143.55	2368.50	1733167.93	14273782.93	39°18'24.2111"N	80°40'19.5833"W	rectangle
2D Rectangle 15055.6 x 100.								

WELLPATH COMPOSITION - Ref Wellbore: Trainer Unit 1H AWB Ref Wellpath: Trainer Unit 1H AWP Proj: 22436'					
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date
30.00	915.00	Gyrodatta 2015 - GC+WIR+DPIPE	01 Gyrodatta MS Gyro <17-1/2"> (50'-915')	Trainer Unit 1H AWB	10/10/2022
915.00	3220.00	BH NaviTrak (2019) (Axial Corr+HRGM)	02 APS EM <12-1/4"> (915')(1044'-3220')	Trainer Unit 1H AWB	10/10/2022
3220.00	6444.00	BH NaviTrak (2019) (Axial Corr+HRGM)	03 APS EM <8-3/4"> (3220')(3317'-6444')	Trainer Unit 1H AWB	11/5/2022
6444.00	22436.00	BH AutoTrak Curve/eXpress (2019) (HRGM, Short spacing)	04 BH AT Curve <8-1/2"> (6444')(6558'-22411')	Trainer Unit 1H AWB	11/5/2022

RECEIVED  
 Office of Oil and Gas  
**JUN 2 2023**  
 WV Department of  
 Environmental Protection



# Actual Wellpath Report

Trainer Unit 1H AWP Proj: 22436'

Page 12 of 12



REFERENCE WELLPATH IDENTIFICATION			
Operator	ANTERO RESOURCES CORPORATION	Well	Trainer Unit 1H
Field	Doddridge	API	47-017-06939-0000
Facility	Lemley Pad	Wellbore	Trainer Unit 1H AWB
Slot	Slot A		

COMMENTS
<p><b>Wellpath general comments</b> API: 47-017-06939-0000 BH Job #: 111534786 Rig: H&amp;P 531 Duration: 11/6/2022-11/14/2022 Gyrodatta MS Gyro &lt;17-1/2"&gt; (50'-915') APS EM &lt;12-1/4"&gt; (915')(1044'-3220') APS EM &lt;8-3/4"&gt; (3220')(3317'-6444') BH AT Curve &lt;8-1/2"&gt; (6444')(6558'-22411') Sycamore: 6812' MD Middlesex: 6977' MD Burkett: 7202' MD Tully: 7256' MD Hamilton: 7372' MD Marcellus POE: 7437' MD Projected MD at TD: 22436'</p>

RECEIVED  
Office of Oil and Gas  
JUN 2 2023  
WV Department of  
Environmental Protection